

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1 – 32. (Cancelled)

33. (New) A belt sander comprising:

a body element having a handle portion;

a driven roller connected to said body element on a first end and having a second free end extending proximate said body element;

a non-driven roller connected to said body element on a first end and having a second free end extending proximate said body element; and

a motor contained within said driven roller and operable to provide rotatable motion to said driven roller.

34. (New) The belt sander of claim 33, wherein said motor comprises an electric motor.

35. (New) The belt sander of claim 34, wherein said motor comprises an outer rotor drum and a stator, wherein said outer rotor drum defines an outer surface of said driven roller and is adapted to rotate around said stator during operation of the belt sander.

36. (New) The belt sander of claim 35, further comprising a casing arranged between said driven roller and said non-driven roller.

37. (New) The belt sander of claim 36, further comprising a sanding belt supported by said driven roller and said non-driven roller.

38. (New) The belt sander of claim 37 wherein said sanding belt is removable.

39. (New) The belt sander of claim 38, wherein said casing is arranged within a boundary defined by said sanding belt.

40. (New) The belt sander of claim 39, wherein said casing includes an adjustment mechanism cooperating with one of said driven and non-driven rollers, said adjustment mechanism adapted to change a distance between said driven and non-driven rollers.

41. (New) The belt sander of claim 39, wherein said casing comprises a power source capable of powering said motor.

42. (New) The belt sander of claim 41, wherein said power source includes one of a power module and an electric battery.

43. (New) The belt sander of claim 34, wherein said electric motor comprises a claw pole motor.

44. (New) A belt sander comprising:
a body element having a handle portion;
a non-driven roller arranged proximate said body element and having a free end proximate said body element;
an electric motor having a stator and a rotor drum, said rotor drum defining a driven roller having a free end and arranged proximate said body element, said electric motor operable to provide rotatable motion of said rotor drum around said stator;
and
a sanding belt removably disposed around said non-driven roller and said driven roller.

45. (New) The belt sander of claim 44, wherein said electric motor comprises a claw pole motor.

46. (New) The belt sander of claim 45, wherein said stator comprises a central shaft and at least one electrically independent claw pole stator element.

47. (New) The belt sander of claim 46, wherein said at least one electrically independent claw pole stator element comprises:

a substantially circular first half-claw member having a first central element and a first plurality of claws; and

a substantially circular second half-claw member having a second central element and a second plurality of claws.

48. (New) The belt sander of claim 47, wherein said first and second half-claw members are arranged in equi-angular intervals around respective perimeters of said first and second half-claw members.

49. (New) The belt sander of claim 48, wherein said first and second central element are joined together whereby said first and second plurality of claws juxtapose each other.

50. (New) The belt sander of claim 49, wherein said claw pole motor includes a field coil disposed within a cylindrical space enclosed by said first and second half-claw members.

51. (New) A belt sander comprising:
a body element having a handle extending in a generally upright orientation;
a non-driven roller having a mounted end and a free end, said non-driven roller arranged proximate said body element;

an electric motor having a stator and a rotor drum, said rotor drum defining a driven roller having a mounted end and a free end, said driven roller arranged proximate said body element, said electric motor operable to provide rotatable motion of said rotor drum around said stator;

a sanding belt supported around said non-driven roller and said driven roller, wherein said electric motor occupies a space defined within a boundary of said belt; and

a casing arranged between said non-driven roller and said driven roller, said casing comprising an adjustment mechanism communicating with one of said non-driven roller and said driven roller, said adjustment mechanism operable to change a distance defined between said non-driven roller and said driven roller.

52. (New) The belt sander of claim 51 wherein said sanding belt is removable.

53. (New) The belt sander of claim 52, wherein said electric motor comprises a claw pole motor.

54. (New) The belt sander of claim 53, wherein said stator comprises a central shaft and at least one electrically independent claw pole stator element.

55. (New) The belt sander of claim 54, wherein said at least one electrically independent claw pole stator element comprises:

a substantially circular first half-claw member having a first central element and a first plurality of claws; and

a substantially circular second half-claw member having a second central element and a second plurality of claws.